

High-Level Functional Description of SYM_DistributeStateData (SYM_Dsd)

The SYM_DSD function is the interface through which internal SYM functions and other CCS subsystems request and receive state data. SYM_DSD will maintain the information listed below; in addition,

Data	Detailed Description	Source
Mnemonic Name		PRD Info
HST Expected States	Value Format (EU/Raw) Tolerance Time Stamp	SYM_DetectFaults (from CMD)
HST True States	EU Value Raw Value Flags Time Stamp	FEP
SN Expected States		SYM_DetectFaults (from CMD)
SN True States		SYM_ManageEvents (from FEP, via Filtered Events))
SYM_Leg Data	FINATT, CRSATT, DRB...	SYM_Leg
Compare Status	ES = TS \pm Tolerance? Yes/No	SYM_DetectFaults
General Status	Spacecraft Day/Night ZOE In/Out TBD	SYM_DetectFaults (from CMD)

SYM_DSD will provide the above data to requesting SYM functions and other CCS subsystems in several ways:

- A one-time snapshot of all current information about a mnemonic
- The current True State value of a mnemonic
- The current compare status (Yes/No) for a mnemonic
- A one-time request for recent historical data
- A continuous feed mechanism, to allow requesters to subscribe for continuous updates of selected mnemonics
 - Changes Only
 - Every x time(secs, mins...)
 - Every x samples

- All points